

REMARKS/ARGUMENTS

Claims 23-33 are pending.

Claims 23-33 were rejected under 35 U.S.C. § 103(a) for allegedly being obvious in view of Chawla et al., U.S. Pat. No. 6,876,668.

Independent claim 23 recites a “storage system” comprising I/O ports for connection to a communication network, where the I/O ports receive write requests. The storage system further comprises an array of media comprising a plurality of disk storage units organized into a plurality of logical disks. The storage system further comprises data paths for selective connection between the logical disks and the I/O ports, and an allocator to allocate the data paths between the logical disks and the I/O ports based upon a data rate capability of the data paths to provide a desired quality of service.

Chawla et al. disclose a communication network 200 (Fig. 3) including data links 202 which interconnect data communications devices 201-A through 201-E and hosts 210 (including hosts 210-A1, 210-A2 and 210-A3). *Col. 11, lines 20-25*. The data communication devices 201 provide the processing resources (routing and switching algorithms, queues, buffers, switching fabrics, data busses, backplanes, input and output ports, and so forth) to propagate data through the network 200 between the hosts 210. The data communication devices 201 may be any type of data processing device that can transfer, switch, route or otherwise direct or propagate data in a network. Possible examples of data communications devices 201 are network access servers, routers, switches, hubs, bridges, gateways, proxy servers, firewalls, modem banks, concentrators, repeaters, and similar data transfer devices. *Id at lines 47-58*.

Chawla et al. do not teach or suggest a storage system comprising I/O ports and an array of media having a plurality of disk storage units organized into a plurality of logical disks. Instead, Chawla et al. disclose hosts 201 connected to data communications devices 201.

Chawla et al. disclose that the data communication devices 201 dynamically reserve bandwidth to one or more sessions of data communication between hosts 210, this does not teach or suggest the recited allocator to allocate data paths between the logical disks and I/O ports based upon a data rate capability of the data paths to provide a desired quality of service.

The Section 103 rejection of independent claim 23 and its dependent claims is believed to be overcome.

Independent claim 29 recites a storage system comprising an array of storage media, I/O ports having a network connection, and data paths to selectively couple the I/O ports to the storage media, wherein a data path between one or more of the storage media and the network connection is selected to provide sufficient data speed to accommodate the desired quality of service.

Chawla et al. do not teach or suggest a storage system comprising an array of storage media and I/O ports having a network connection. The combination of the data communication device 201 with the hosts 201 do not teach or suggest the recited storage system, even if the host 201 includes an array of storage media. The data communication device 201 is a separate element from hosts 201, with separate functionality. Data communication devices (e.g., modem, switch, router) are conventionally viewed as devices that are separate from hosts, and so one of ordinary skill in the art would not be motivated to combine the data communication device 201 with a host 201 to obtain the present invention. The Section 103 rejection of independent claim 29 is believed to be overcome.

Independent claim 30 recites a method for allocating resources in a storage system, where the storage system comprises an array of storage devices coupled to a network connection by data paths. The method includes a step of establishing a data path between a storage device of the array and the network connection where the data path is selected to provide a sufficient data speed based upon data capacity of the storage and data rate capability of the network connection. The method further includes selecting a storage device of the array based upon the data capacity and the data rate capability of the network connection.

Chawla et al. do not teach or suggest establishing a data path between a storage device in an array of devices and the network connection based upon data capacity of the storage device and data rate capability of the network connection. Chawla et al. do not teach or suggest selecting a storage device of the array based upon the data capacity and the data rate capability of

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the network connection. The Section 103 rejection of independent claim 30 and its dependent claims is believed to be overcome.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



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